INDEX

BIOCHEMISTRY

Volume 35, Numbers 1-6, 1970

BIOCHEMISTRY
Volume 35, Numbers 1-6, 1970
(A translation of Biokhimiya)

A

Afanas'ev, P. V.-470, 502
Agabekova, I. I.-43
Akhalkatsai, R. G.-1033
Akhmedov, G. I.-24
Akhobadze, V. A.-505
Akopyan, Zh. I.-116
Aldanova, N. A.-742
Alekseeva, A. E.-667
Alievskaya, L. L.-827
Alina, B. A.-201
Amirkhanyan, M. M.-230, 721, 1009
Ananchenko, S. N.-777
Antonov, V. K.-168
Ashmarin, I. P.-713
Avaeva, S. M.-24, 209, 494, 964

B

Balyabina, M. D.-89
Baratova, L. A.-1051
Barsanovich, E. A.-610
Baskova, I. P.-670
Beisembaeva, R. U.-209
Bekina, R. M.-109
Belen'kii, B. G.-230
Belousova, A. K.-763
Belozerskii, A. V.-177
Belozerskii, M. A.-126
Belyaeva, M. I.-377
Bendetskii, K. M.-553, 950
Berezin, I. V.-213, 851, 914, 1044, 1082
Bergez'son, L. D.-441
Bikbulatov, R. M.-425
Blinov, M. N.-652
Bochkova, D. N.-1014
Bogdanov, A. A.-367, 879
Bogdanovskaya, T. A.-680
Bogolyubova, G. M.-998
Boikov, P. Ya.-431
Botvinik, M. M.-21, 610
Bozhkov, V. M.-923
Braunshtein, A. E.-220
Brestkin, A. P.-317, 526, 575
Brik, I. L.-317
Bukhar, M. I.-737, 1024
Bukin, V. N.-873
Bukrinskaya, A. G.-464
Bunyatyan, G. Kh.-347
Buzun, G. A.-868

C

Chelibonova, Kh.-437
Cherkashina, N. A.-39
Cherkasov, I. A -150
Chernikov, M. P.-419
Chernov, N. N.-919
Chernyad'ev, I. I.-839
Chetverikova, E. K.-998
Chetverikova, E. P.-827
Chikhirzhina, G. I.-713
Chugunov, V. A.-505
Chukhrova, A. I.-78
Chulkova, T. M.-237

D

Dabagov, N. S.-782
Davtyan, M. A.-341
Dababov, V. G.-703
Debov, S. S.-449, 605, 907, 957
Degtyarenko, V. I.-961
Delektorskaya, L. N.-284
Del'vig, A. A.-449, 957
Dmitrovskii, A. A.-674
Dolapchiev, L. V.-928
Doman, N. G.-839
Dontsova, G. V.-138
Dosta, G. A.-801
Druzhinina, T. N.-73
Drygin, Yu. F.-879
Dubur, G. Yu.-763
D'yakov, V. L.-21, 610
Dyatlovskaya, É. V.-441
Dyurnbaum, V. I.-713
Dzhemukhadze, K. M.-868

E

Egorov, A. M.-209
Egorova, V. V.-777
Elinov, N. P.-550, 1028
Emtseva, I. B.-126
Ermakova, L. N.-950
Ermakova, N. G.-703
Ermolaeva, N. V.-12, 566, 907
Étingof, R. N.-27
Evstigneev, V. B.-39
Evstigneeva, Z. G.-226

F

Fais, F.-979
Fedorova, N. E.-444
Filanovskaya, L. I.-834
Filippova, N. N.-834
Filippovich, I. I.-201
Fillippov, P. P.-350
Firfarova, K. F.-634

G

Gachava, M. M.-278
Gaitskhoki, V. S.-278
Galegov, G. A.-70, 425
Galimova, L. M.-177
Gapparov, G.-284
Garyaev, P. P.-247
Gazaryan, K. G.-1069
Geidan, M. A.-912
Gel'man, N. S.-972
Gerasimova, A. V.-590
Gershanovich, V. N.-65, 579
Giller, Yu. E.-758
Ginodman, L. M.-732
Girshovich, A. S.-385
Glebov, R. N.-937
Glemzha, A. A. -480
Glikina, M. V.-1004
Gol'danskii, V. I.-1051
Golovatskii, I. D.-241
Gonchar, N. A.-183
Gorkin, V. Z.-116
Gor'kova, N. P.-441
Goryachenkova, E. V.-220
Grachev, M. A.-385
Gren, E. Ya.-192
Gridneva, L. I.-116
Groshev, V. V.-856

Gumanov, L. L.-431
Gurinovich, A. Kh.-937
Gusev, A. I.-142

H

Hubner, G.-801

I

Il'in, A. V.-505
Il'in, V. S.-89, 257, 415
Il'ina Yu. N.-470
Ispolatovskaya, M. V.-394
Ivanchik, T. A.-138
Ivanov, V. T.-993
Ivanova, L. A.-575
Ivanova, L. V.-561
Izotova, A. E.-888

K

Kafiani, K. A.-1033
Kagan, Z. S.-813
Kalyuzhnaya, A. P.-685
Karandashov, É. A.-33
Karpinskaya, E. V.-998
Karpov, V. L.-522
Kashkin, K. P.-1014
Kaverzneva, E. D.-78
Kazakova, O. V.-634
Kazakova, T. B.-278
Kazanskaya, N. F.-213, 851, 993
Kazaryan, S. A.-742
Khailova, L. S.-480
Khanson, K. P.-561, 942
Khashimov, D. A.-813
Khasigov, P. Z.-522, 605
Khorlin, A. Ya.-103
Khusainova, F.-290
Kirsenko, O. V.-335
Kir'yanov, G. I.-1069
Kishi, H.-801
Klyachko, E. V.-979
Klyachko-Gurvich, G. L.-708
Klyucheva, V. V.-65
Knipl, Ya. S.-1053
Kobylyanskaya, K. R.-1
Kochetkov, G. A.-1, 350, 888, 919, 1085
Kochetkov, N. K.-680
Kochetov, G. A.-541
Kochubei, S. M.-754
Kogan, E. M.-623
Koidan, L. I.-809
Kokryakov, V. N.-713
Komar, V. E.-561, 942
Kometiani, P. A.-327
Kopelevich, V. M.-48
Korovnikov, K. A.-131
Kosourov, G. I.-347
Kosygin, M. Yu.-1051
Kovalenko, N. A.-590
Kozlov, I. A.-590, 879
Kozlova, N. B.-531
Krainev, S. I.-583
Krasnevich, A. Ya.-241
Krasnova, L. V.-641
Krasnovskii, A. A.-109
Kravchenko, N. A.-53, 150
Kretovich, V. L.-226, 657, 1062
Krinskaya, A. V.-827
Krivtsov, V. F.-968
Kulaev, I. S.-536
Kulaeva, N. V.-33
Kulaeva, O. N.-1053
Kul'berg, A. Ya.-641
Kulida, L. I.-572
Kulikova, A. I.-998
Kul'minskaya, A. S.-1069
Kurganov, B. I.-813
Kushner, V. P.-923
Kuznetsov, Yu. S.-690

L

Labzina, L. Ya.-605, 957
Lapuk, Y. Kh.-53
Larionova, N. I.-213, 851
Lashneva, N. V.-284
Lazareva, A. V.-517
Leshchinskaya, I. B.-377
Lestrovaya, N. N.-737
Levashov, A. V.-1044
Levdikova, G. A.-491
Likhosherstov, L. M.-727
Linitskaya, G. L.-425
Lishko, V. K.-458, 630
Lisovskaya, N. P.-406
Lizenko, E. I.-769
Lukomskaya, I. S.-83
Lukoyanova, M. A.-972
Luk'yanova, L. I.-553, 950
Lushnikova, E. V.-399
Luzikov, V. N.-699, 914
L'vovich, N. A.-290

M

Maizel' E. B.-317
Malysheva, M. K.-458, 630
Mandzhgaladze, D. N.-65, 579
Mardashev, S. R.-183, 449, 605, 667, 782, 788, 957
Markosyan, K. A.-278
Martinek, K.-1044, 1082
Martynova, I. I.-782
Matveeva, L. N.-310
Mazurenko, N. N.-685
Mazzarelli, M.-946
Mednikov, B. N.-177
Mekhanik, M. L.-453
Melik-Sarkisyan, S. S.-1062
Merzlov, V. P.-1085
Meshkova, N. P.-310
Metlina, A. L.-860
Metlitskaya, A. Z.-932
Mevkh, A. T.-494
Mikel'saar, Kh. N.-972
Mikhailova, I. Yu.-367
Mileshko, L. F.-868
Mirakhmedov, A. K.-290
Mishaeva, R. N.-1004
Mitsova, I. Z.-595
Morozova, A. V.-96
Mosolov, V. V.-399
Moshkovskii, Yu. Sh.-796
Mukha, G. V.-986
Myul'berg, A. A.-713

N

Nagradova, N. K.-304
Narodnitskii, B. S.-791
Nartikova, V. F.-154
Nazarova, T. I.-964
Nefelova, M. V.-522, 572
Nemchinskaya, V. L.-923
Nguen Din Lak-220
Nikitin, A. N.-937
Nikitina, Z. S.-561
Nikolaev, A. Ya.-667
Nikolaeva, Z. K.-497
Nikol'skaya, T. I.-347
Nikulina, G. N.-474
Novikova, M. A.-73

O

Okulov, V. I.-196
Oparin, A. I.-201
Orekovich, V. N.-237, 491, 517, 634
Orlova, T. I.-572
Orlova, V. S.-296
Ostasheva, G. A.-937
Ostrovskii, Yu. M.-801
Ovchinnikov, Yu. A.-993

P

Palladin, A. V.-335
Panaiotov, B. N.-437
Panteleeva, N. S.-33
Pantskhava, E. S.-873
Paskhina, T. S.-154, 916
Paulova, N. A.-449
Pchelkina, V. V.-873

Perevoshchikova, K. A.-284
Perova, T. L.-162
Pertaya, A. V.-961
Petrova, A. N.-748
Petrovskii, G. V.-791, 946
Pinus, E. A.-932
Pleskov, V. M.-162, 257
Poglazov, B. F.-247, 347, 860
Pokrovskii, A. A.-131, 284
Pokrovskii, B. V.-59
Polykova, N. M.-458
Ponomareva, L. G.-284
Popova, I. A.-296
Pravdina, N. F.-70
Preobrazhenskaya, M. E.-662
Protserova, N. M.-809
Prozorovskii, V. N.-667, 788
Pugacheva, I. B.-230

R

Rabinovich, Ya. M.-932
Raikher, I. I.-809
Rakhimbekova, L. S.-278
Razumovskaya, N. I.-162, 257
Rebentish, B. A.-703
Rebrov, L. B.-449, 957
Rebrova, T. T.-907
Reingard, T. A.-754
Renkhof, R. F.-192
Rodionov, V. S.-263, 769
Romashina, L. V.-699
Rozanov, A. Ya.-48
Rozanova, N. A.-827
Rozenberg, D. L.-674
Rozenfel'd E. L.-296, 662
Rozengart, E. V.-317, 512
Rozengart, V. I.-43, 998
Rozynov, B. V.-742
Rubailo, V. L.-1044
Rybina, V. V.-827

S

Sadovnik, M. N.-801
Sakhibov, D. N.-9
Saks, V. A.-699, 914
Samsonov, G. V.-1004
Saprykina, T. P.-65
Savluchinskaya, L. G.-48
Seitov, Z. S.-390
Seits, I. F.-652, 834
Semenenko, V. E.-708
Senchenkova, S. N.-727
Senyutenkova, L. G.-230
Severin, S. E.-272, 480, 1079
Severnaya, T. A.-657
Shakulov, R. S.-979
Shashkova, E. A.-103
Shavlovskii, M. M.-895, 986
Shellenberger, A.-801
Shemyakin, M. M.-742
Shepel', E. N.-993
Shestakov, S. V.-856
Shibaev, V. N.-73
Shibnev, V. A.-491, 517
Shukolyukov, S. A.-27
Shul'mina, A. I.-470
Shuppe, N. G.-615
Shutko, A. N.-561, 942
Shvachkin, Yu. P.-968
Shvetsov, Yu. N.-843
Silaev, A. B.-572
Silonova, G. V.-406
Simakova, I. M.-972
Simich, M.-1033
Sitkevich, R. V.-43
Sito, A. F.-1040
Skulachev, V. P.-1079
Slobodyanskaya, E. M.-993
Smirnova, G. P.-680
Soboleva, I. N.-512
Sokhina, A. M.-788
Solov'eva, N. I.-522
Sorokin, V. M.-9
Sorokina, I. B.-441
Stan, E. Ya.-419
Stepanenko, B. N.-96
Stepanov, V. M.-230, 690, 721, 1009
Stesina, L. N.-116
Strukova, S. M.-670
Surinov, B. P.-1014
Sytinskii, I. A.-497

T

Tarkhanova, I. A.-641
Tartakovskii, S. A.-667
Taptykova, S. D.-972
Telepneva, V. I.-272
Tikhonenko, T. I.-791, 946
Tikhonova, G. V.-972
Timofeeva, M. Ya.-1033
Titov, A. V.-486
Titova, G. V.-892
Tomova, N. G.-226
Tongur, A. M.-201
Torchinskii, Yu. M.-453
Torkhovskaya, T. I.-441
Troitski, G. V.-196
Tsaregorodtseva, S. O.-769
Tseitlin, L. A.-272
Tsetlin, V. I.-993
Tsitovskaya, G. A.-968
Turakulov, Ya. Kh.-290
Tutel'yan, V. A.-284
Tyutrina, G. V.-78

U

Umetskaya, M. N.-526, 648
Uriarte, A.-670
Uryson, S. O.-536
Usmanov, R. A.-541, 1085
Ustyuzhanin, G. E.-623

V

Vakhitova, E. A.-230, 1009
Valueva, T. A.-732
Valyulis, R. A.-230
Vanyukova, N. A.-168
Varfolomeev, S. D.-1044
Vasenev, V. I.-690
Vasilenko, S. K.-382
Vasilets, I. M.-895, 986
Vasil'ev, V. Yu.-497
Vasil'eva, L. E.-415
Vasil'eva, T. P.-856
Vavilova, G. L.-335
Vereshchagin, A. G.-708
Verevkina, I. V.-116
Vichutinskii, A. A.-103
Vidershain, G. Ya.-727
Vikha, I. V.-103
Vinogradov, A. D.-843
Vinogradova, E. I.-742,
Vitovskaya, G. A.-550, 1028
Vlasov, G. P.-1004
Vodolazskaya, N. A.-566, 901
Volkova, R. I.-317
Vorkunova, G. K.-464
Vorob'eva, N. N.-964
Votrin, I. I.-605, 957
Vul'fson, P. L.-531

Y

Yaguzhinskii, L. S.-1079
Yakovlev, V. A.-595
Yampol'skii, P. A.-1051
Yarovenko, V. L.-553, 950
Yarovenko, V. V.-1062
Yasnikov, A. A.-801
Yazova, A. K.-142
Yudaev, N. A.-59
Yukel'son, L. Ya.-9
Yukhananova, L. N.-758
Yurganova, L. G.-444

Z

Zaitseva, G. N.-505, 685

Zakharenko, E. T.-796
Zakharova, L. S.-263
Zakharychev, A. V.-777
Zatsepin, N. I.-961
Zbarskii, I. B.-284
Zhagat, R. A.-912
Zharov, V. V.-937
Zhdanov, V. M.-464, 1040
Zhdanovich, E. S.-48
Zhivkov, V. I.-437
Zhuchikhina, A. A.-27
Zhukova, I. G.-680
Zhumashev, Zh.-390
Zilber, Yu. A.-763
Zimakova, N. I.-843

BIOCHEMISTRY
Volume 35, Numbers 1-6, 1970
(A translation of Biokhimiya)

Volume 35, Number 1, Part 1 January-February, 1970

	Engl.	Russ.
The Nature and Function of Amino Acid Residues of Transketolase Essential for Manifestation of Its Activity – G. A. Kochetov and K. R. Kobylyanskaya	1	3
Isolation of Phospholipase from Venom of the Middle Asian Cobra – D. N. Sakhibov, V. M. Sorokin, and L. Ya. Yukel'son	9	13
Effect of pH and Inorganic Phosphate of the Incubation Medium on the Breakdown of Deoxyribonucleoproteins of Lymphoid Cells – N. V. Ermolaeva	12	17
Inhibition of α-Chymotrypsin by Isoamylchloromethyl Ketone – M. M. Botvinik and V. L. D'yakov	21	27
Interaction of Inorganic Yeast Pyrophosphatase with Carboxypeptidase A – S. M. Avaeva and G. I. Akhmedov	24	31
Glucose-6-phosphate Dehydrogenase and Lactate Dehydrogenase of Membranous Structures of the Retina – R. N. Étingof, A. A. Zhuchikhina, and S. A. Shukolyukov	27	35
Effect of Trinitrophenylation of Myosin on the Isotopic Exchange Reaction of Oxygen in the Myosin–ATP–H_2O^{18} System – N. V. Kuleva, É. A. Karandashov, and N. S. Panteleeva	33	42
Isolation of Chlorophyll d from the Alga Grateloupia dichotoma – V. B. Evstigneev and N. A. Cherkashina	39	48
Rate of Reactivation of Inhibited Cholinesterase in Dependence upon Structure of Organophosphorus Inhibitors – I. I. Agabekova, V. I. Rozengart, and R. V. Sitkevich	43	53
Biosynthesis of Acylation Coenzyme from Pantothenate in the Organism of White Rats – A. Ya. Rozanov, L. G. Savluchinskaya, E. S. Zhdanovich, and V. M. Kopelevich	48	58
The Route of the Reaction in Selective Tryptophan Photooxidation in Lysozyme – N. A. Kravchenko and Y. Kh. Lapuk	53	64
Comparative Study of the Effect of Estrogens and Androgens on RNA Synthesis in the Rat Uterus – N. A. Yudaev and B. V. Pokrovskii	59	72
Repression of the Synthesis of Catabolic Enzymes in Escherichia coli Mutants with Different Defects in the Glucose Utilization System — V. N. Gershanovich V. V. Klyucheva, T. P. Saprykina, and D. N. Mandzhgaladze	65	79
Role of Uridine in the Synthesis of Phage-Specific DNA in Escherichia coli Cells Infected with Phage T2 – N. F. Pravdina and G. A. Galegov	70	85
Inhibition of UDP-Glucose-4-epimerase by Nucleoside Monophosphates and Nucleoside Diphosphates – T. N. Druzhinina, M. A. Novikova, and V. N. Shibaev	73	89
Isolation of Enzymes Splitting the Carbohydrate-Peptide Bond of the Amide Type from the Snail Limnaea stagnalis – A. I. Chukhrova, E. D. Kaverzneva, and G. V. Tyutrina	78	95

Volume 35, Number 1, Part 2 January-February, 1970

	Engl.	Russ.
Purification and Properties of Trehalase from Rabbit Liver–G. I. Tarasova and I. S. Lukomskaya	83	102

Gluconeogenesis and Glycolysis in the Kidneys of Normal and Alloxan Diabetic Rats —V. S. Il'in and M. D. Balyabina 89 109
Enzymatic Synthesis of UDP-C^{14}-Glucose from C^{14}-Glucose—A. V. Morozova and B. N. Stepanenko 96 117
Interaction of Lysozyme with Low Molecular Inhibitors and Modified Substrates Containing β-(1→4)- and β-(1→6) Glucosaminide Linkages—E. A. Shashkova, I. V. Vikha, A. A. Vichutinskii, and A. Ya. Khorlin 103 124
Effects of Various Methods of Decomposition of Chloroplasts on the Photophosphorylating Activity—R. M. Bekina and A. A. Krasnovskii 109 132
Deamination of Some Biogenic Amines and other Nitrogenous Compounds by Liver Mitochondria—V. Z. Gorkin, Zh. I. Akopyan, I. V. Verevkina, L. I. Gridneva, and L. N. Stesina 116 140
A Comparative Study of the Proteins of Diploid and Tetraploid Buckwheat Seeds —M. A. Belozerskii and I. B. Emtseva 126 152
Changes in the Isoenzyme Spectra of the Organs during Starvation—A. A. Pokrovskii and K. A. Korovnikov 131 159
Synthesis of High-Molecular Ribonucleic Acids during Early Development of Loach —G. V. Dontsova and T. A. Ivanchik 138 167
Isolation and Purification of Embryospecific α-Globulins of Man and Animals by the Method of Preparative Disc Electrophoresis in Polyacrylamide Gel —A. I. Gusev and A. K. Yazova 142 172
Determination of the Heat of Formation of the Enzyme—Substrate Complex of Lysozyme with Chitin by a Chromatographic Method—I. A. Cherkasov and N. A. Kravchenko 150 182
Kinetics of Inhibition of Trypsin Activity by a Thermo- and Acid-Stable Inhibitor from the Rabbit Blood Serum—V. F. Nartikova and T. S. Paskhina 154 187
Soluble and Mitochondrial Forms of the Pentose Phosphate Cycle Dehydrogenases in the Skeletal Muscles of the Rabbit—N. I. Razumovskaya, V. M. Pleskov, and T. L. Perova 162 196

BRIEF COMMUNICATIONS
Isosteric Analogs of α-Chymotrypsin Substrates—V. K. Antonov and N. A. Vanyukova . . 168 202

BOOK REVIEWS
J. D. Bernie and Sylvia M. Fox, Editors—Subcellular Components: Preparation and Fractionation—Reviewed by A. I. Archakov 170 204

Volume 35, Number 2, Part 1 March-April, 1970

The Principles of Dialectrical Materialism and the Development of Biochemistry. (On the Centenary of V. I. Lenin's Birthday, 1870-1970) 173
Ribonucleotide-Mistranslation Patterns in vivo and in vitro — B. M. Mednikov, L. M. Galimova, and A. N. Belozerskii 177
Inhibition of Bacterial-Histidine Decarboxylase by Hydroxylamine Derivatives —N. A. Gonchar and S. R. Mardashev 183
Study of Optical Rotatory Dispersion of β-Lactoglobulins A and α-Lactalbumins of Sheep, Cow, and Buffalo — Francesco De Felice and Michele Vitagliano 187
Synthesis and Chromatographic Properties of Isonicotinoylhydrazine Derivatives of Nucleosides and Nucleotides — R. F. Renkhof and É. Ya. Gren 192
Optical Rotatory Dispersion of Histones in Visible Light — V. I. Okulov and G. V. Troitskii 196
Structural Organization of the Protein-Synthesizing System of Chloroplasts — I. I. Filippovich, A. M. Tongur, B. A. Alina, and A. I. Oparin 201
A Study of Quaternary Structure of the Yeast Inorganic Pyrophosphatase — S. M. Avaeva, R. U. Beisembaeva, and A. M. Egorov 209

Determination of the Equilibrium Constant for the Reaction between Trypsin and Trypsin Inhibitor from Lung Tissue of Cattle – I. V. Berezin, N. F. Kazanskaya, and N. I. Larionova 213 261
The Substrate Specificity of Serine Sulfhydrase from Hen Liver and Its Relation to Inhibitors – Nguen Din Lak, E. V. Goryachenkova, and A. E. Braunshtein 220 270
Effect of the Nitrogen Source on Chlorella Glutamate Dehydrogenase and Alanine Dehydrogenase – V. L. Kretovich, N. G. Tomova, and Z. G. Evstigneeva 226 278
Isolation of Peptides from a Chymotrypsin Hydrolysate of the N-Terminal Fragment of Pepsin and Determination of Their Amino Acid Sequence – V. M. Stepanov, M. M. Amirkhanyan, B. G. Belen'kii, R. A. Valyulis, E. A. Vakhitova, I. B. Pugacheva, and L. G. Senyutenkova 230 283
Importance of Free Amino Groups for the Enzymatic Activity of Thrombin – T. M. Chulkova and V. N. Orekhovich 237 291
The Nucleotide Pool and Some Aspects of the Metabolism of Endogeneous Nucleotides in the Heart Muscle – I. D. Golovatskii and A. Ya. Krasnevich 241 296
Spherical Structures Produced by Pseudomonas aeruginosa along with Pyocin R – P. P. Garyaev, B. F. Poglazov, and L. S. Kozlova 247 303
Purification and Properties of Hexokinase Isozymes in Normal, Tenotomized, Denervated, and Embryonic Rabbit Muscles – V. S. Il'in, V. M. Pleskov, and N. I. Razumovskaya 257 312

Volume 35, Number 2, Part 2 March-April, 1970

Investigation of the Intracellular Distribution of Acetyl-CoA-Synthetase in Spinach Leaves Spinacia oleracea – V. S. Rodionov and L. S. Zakharova 263 319
Isolation, Purification, and Properties of NAD-Kinase from the Cardiac Muscle – S. E. Severin, V. I. Telepneva, and L. A. Tseitlin 272 329
On the Nature of the Ribose-Containing Component of Rat-Liver Mitochondrial DNA Preparations – V. S. Gaitskhoki, M. M. Gachava, T. B. Kazakova, K. A. Markosyan, and L. S. Rakhimbekova 278 336
Esterase Activity and Enzyme Constellations of Nuclear Membranes and Nuclei of the Rat Liver – A. A. Pokrovskii, I. B. Zbarskii, L. G. Ponomareva, M. M.-G. Gapparov, V. A. Tutel'yan, N. V. Lashneva, K. A. Perevoshchikova, and L. N. Delektorskaya 284 343
Respiration, Phosphorylation, and Structure of Rat Liver Mitochondria during Thyroxine Action in vivo and in vitro – Ya. Kh. Turakulov, A. K. Miralkhmedov, N. A. L'vovich, and F. Khusainova 290 349
The Regulation of Glycogen Metabolism – E. L. Rozenfel'd, I. A. Popova, and V. S. Orlova 296 356
Activation of Yeast Glyceraldehyde-3-phosphate Dehydrogenase by Salts – N. K. Nagradova and R. A. Asriyants 304 366
Isolation, Purification, and Some Properties of Succinyl-CoA-Synthetase from Pigeon Pectoral Muscle – N. P. Meshkova and L. N. Matveeva 310 374
Influence of Ionic Strength and Organic Solvents on Interaction of Cholinesterases with Substrates and Organophosphorus Inhibitors – A. P. Brestkin, I. L. Brik, R. I. Volkova, E. B. Maizel', and E. V. Rozengart 317 382
Metabolic Activity of Amido Nitrogen of Brain Proteins – P. A. Kometiani 327 394
Na + K-Dependent ATPase of Brain and the Use of Detergents for Its Extraction – A. V. Palladin, O. V. Kirsenko, and G. L. Vavilova 335 404
Purification and Properties of Rat Brain Arginase – M. A. Davtyan and G. Kh. Bunyatyan 341 412

Engl./Russ.

BRIEF COMMUNICATIONS
Molecular Organization of the Tail Rod of Bacteriophage T2 – G. I. Kosourov, B. F. Poglazov, and T. I. Nikol'skaya 347 419
Calcium as a Cofactor of Baker's Yeast Transketolase – G. A. Kochetov and P. P. Filippov 350 422

CHRONICLES
Second All-Union Biochemical Congress 352 425

Volume 35, Number 3, Part 1 May-June, 1970

Electrophoresis of the Ribosomes and Ribosomal RNA in Polyacrylamide Gel – I. Yu. Mikhailova and A. A. Bogdanov 367 403
Isolation and Certain Properties of DNAase of the Chromatin of Rat Liver Nuclei – M. I. Belyaeva, N. L. Zotkina, and V. G. Vinter 372 409
Study of the Properties of Bacillus subtilis Deoxyribonuclease – G. I. Tyrygina, M. I. Belyaeva, and I. B. Leshchinskaya 377 415
Decomposition of Ribosomal RNA in the Spleen during Immunogenesis – B. D. Stanchev .. 382 420
The Extraction of Valine $tRNA_1$ from Baker's Yeast – S. K. Vasilenko, A. S. Girshovich, and M. A. Grachev 385 424
The Protein Composition of Total Cow's Milk Casein – Z. S. Seitov and Zh. Zhumashev .. 390 430
Role of Metals in the Activity of Clostridium perfringens Lecithinase – M. V. Ispolatovskaya 394 434
The Principle of Purification of Peptide Hydrolases Based on the Use of Insoluble Protein Inhibitors – V. V. Mosolov and E. V. Lushnikova 399 440
Dimer-Tetramer Transitions of Phosphorylase B from Rabbit Muscles – N. P. Lisovskaya and G. V. Silonova 406 448
Participation of SH-Groups in the Stimulating Action of Insulin on Uptake of C^{14}-Glycine by Tissues and Its Incorporation into Tissue Proteins – L. E. Vasil'eva and V. S. Il'in 415 458
Rate of Hydrolysis of α_S, β, and k-Casein by Trypsin and Chymotrypsin and the Effect of Denaturing Factors on the Enzyme Hydrolysis of k-Casein – M. P. Chernikov and E. Ya. Stan 419 463
Influence of 5-Bromouridine on Vaccinia Virus Reproduction – G. A. Galegov, R. M. Bikbulatov, and G. L. Linitskaya 425 470
Association of Some Early Phage-T4B Proteins with Homologous DNA in vitro – P. Ya. Boikov and L. L. Gumanov 431 477
Effect of 2,4-Dinitrophenol on the Content and Specific Activity of Acid-Soluble Nucleotides in Rat Livers – V. I. Zhivkov, Kh. Chelibonova, and B. N. Panaiotov .. 437 484
Tumor Lipids and Distribution of Phospholipids in Mitochondria and Microsoma of the Solid Rat Hepatoma 27 and Mouse Hepatoma 22 – É. V. Dyatlovskaya, T. I. Torkhovskaya, I. B. Sorokina, N. P. Gor'kova, and L. D. Bergel'son 441 489
Tryptic Hydrolysis of Esters of N-(α) Substituted Derivatives of Arginine – L. G. Yurganova and N. E. Fedorova 444 493
The Nucleotide Composition of Polyribonucleotides Synthesized by Polynucleotide Phosphorylase in the Presence of Various Amino Acids – A. A. Del'vig, S. R. Mardashev, N. A. Pavlova, L. B. Rebrov, and S. S. Debov 449 499

Volume 35, Number 3, Part 2 May-June, 1970

A Nonapeptide from the Active Site of Glutamate Decarboxylase of E. coli –M. L. Mekhanik and Yu. M. Torchinskii 453 504

	Engl.	Russ.
Conformational Changes in the Structure of the Ionic Pump in the Interaction of Na^+–K^+–ATPase with Ouabain – V. K. Lishko, M. K. Malysheva, and N. M. Polyakova	458	510
Synthesis of Protein in Paramyxovirus-Infected Cells of Susceptible and Resistant Lines at the Early Stage of Infection – A. G. Bukrinskaya, G. K. Vorkunova, and V. M. Zhdanov	464	516
Association of Bovine Serum Albumin at Different pH – A. I. Shul'mina, Yu. N. Il'ina, and P. V. Afanas'ev	470	524
Relative Turnover Rate of Labile and Stable Nucleotide Phosphate at Various Temperatures – G. N. Nikulina	474	529
Isolation of Pyruvate Decarboxylase from the Pyruvate Dehydrogenase Complex of Pigeon Breast Muscle – L. S. Khailova, A. A. Glemzha, and S. E. Severin	480	536
Reaction of Proteins with Low-Molecular Weight Thiols and Disulfides in vitro – A. V. Titov	486	543
Action of Clostridium perfringens Collagenase on Some Synthetic Substrates – V. N. Orekhovich, G. A. Levdikova, and V. A. Shibnev	491	549
Formation of an Intermediate Compound in Substrate Hydrolysis by Yeast Inorganic Pyrophosphatase – S. M. Aveeva and A. T. Mevkh	494	552
Further Study of the Properties of γ-Aminobutyrate–Glutamate-Transaminase –V. Yu. Vasil'ev, I. A. Sytinskii, and Z. K. Nikolaeva	497	556
The Physical Principles Underlying the Determination of the Molecular Sizes of Proteins by Gel Filtration – P. V. Afanas'ev	502	562
Cytoplasmic and Nuclear Ribosomes of Strigomonas oncopelti – G. N. Zaitseva, A. V. Il'in, V. A. Chugunov, and V. A. Akhobadze	505	565
Influence of Ammonium Compounds on the Cholinesterase Hydrolysis of Indophenylacetates – E. V. Rozengart and I. N. Soboleva	512	574
Action of Clostridium histolyticum Collagenase on Hexa- and Polypeptides – N. I. Solov'eva, V. N. Orekhovich, V. A. Shibnev,and A. V. Lazareva	517	579
Influence of Chloramphenicol on C^{14}-Amino Acid Incorporation into Actinomycins by an Actinomyces sp. Culture – M. V. Nefelova, V. L. Karpov, and P. Z. Khasigov	522	585
Evaluating the Accuracy of Determining Cholinesterase Activity – A. P. Brestkin and M. N. Umetskaya	526	589
The Effect of AMP on the Properties of Native and Acetylated Phosphorylase A – P. L. Vul'fson and N. B. Kozlova	531	595
BRIEF COMMUNICATIONS		
Glucokinase Activity in Green and Blue-Green Algae – S. O. Uryson and I. S. Kulaev	536	601
BOOK REVIEWS		
Chemical Mediators of Nervous Impulses and Contemporary Achievements in the Study of the Metabolism of Biogenic Amines under Normal and Pathological Conditions – V. Z. Gorkin	538	604

Volume 35, Number 4, Part 1 July-August, 1970

Investigation of Transketolase Employing Optical Rotatory Dispersion – G. A. Kochetov and R. A. Usmanov	541	611
Chemical Study of the Structural–Metabolic Polysaccharides of Organisms of the Genus Rhodotorula – N. P. Elinov and G. A. Vitovskaya	550	622
Hydrolysis of Homoglucosides by Glucamylase Prepared from Aspergillus awamori: Decomposition of Homoglucoside Chains under the Effect of Glucamylase Preparations – K. M. Bendetskii, V. L. Yarovenko, L. N. Ermakova, and L. I. Luk'yanova	553	627

Comparison of the Biosynthesis of Mitochondrial and Nuclear DNA in the Process of Regeneration of Rat Liver after Partial Hepatectomy – K. P. Khanson, L. V. Ivanova, Z. S. Nikitina, A. N. Shutko, and V. E. Komar 561 635
Separation on Phosphate Cellulose of the Products of Degradation of Deoxyribonucleoprotein Formed after Irradiation and Enzymatic Action in vitro – N. V. Ermolaeva and N. A. Vodolazskaya 566 641
The Role of N-Acetyl-4-methyl-3-hydroxyanthranilic Acid in the Biosynthesis of the Actinomycin Antibiotic Aurantin – T. I. Orlova, M. V. Nefelova, L. I. Kulida, and A. B. Silaev 572 648
The Effect of Lithium and Calcium Ions on the Activity of Erythrocyte-Derived Acetylcholinesterase – A. P. Brestkin and L. A. Ivanova 575 652
Glucose Transport in an E. coli Mutant Deficient in Glucose-6-phosphate Dehydrogenase and Hexose Phosphate Isomerase – V. N. Gershanovich and D. N. Mandzhgaladze . 579 657
Forms of Catalase Found in Human Erythrocytes – S. I. Krainev..... 583 662
Change in the Glutaminase Activity of Clostridium welchii SR-12 under the Influence of Certain Analogs of Glutamine and Sulfhydryl Group Reagents – N. A. Kovalenko, E. A. Kozlov, and A. V. Gerasimova 590 670
Effects of Inhibitors on the Hydrogenase of Azotobacter vinelandii – V. A. Yakovlev and I. Z. Mitsova..... 595 675
Spectrophotometric Study of the Formation of Bacterial-Type Pigments in the Photoreduction of Derivatives of Chlorophylls *a* and b..... 600 681
Electrophoretic Separation of Ribosomal Proteins in a Column with a Linear pH Gradient – I. I. Votrin, S. S. Debov, S. R. Mardashev, P. Z. Khasigov, and L. Ya. Labzina.. 605 687
Catalytic Properties of Carboxymethyl Chymotrypsin Oxidized at the Methionine-192 Residue – M. M. Botvinik, V. L. D'yakov, and E. A. Barsanovich..... 610 693
RNA Metabolism in Cells of Ovarian Ascites Tumor with 2,4-Dinitrophenol and Sodium Fluoride – N. G. Shuppe 615 698
Alcoholysis of Uridine-2',3'-cyclophosphate by Uridine in the Presence of Pancreatic RNAase – G. E. Ustyuzhanin and E. M. Kogan..... 623 708
Effect of Acetyl Phosphate and Inorganic Phosphate on the Reaction of Na^+-K^+-ATPase with Ouabaine – M. K. Malysheva, V. K. Lishko, and N. M. Polyakova..... 630 717
A Comparative Investigation of the Tissue Proteinases from the Liver of Various Species of Vertebrates Including Man – O. V. Kazakova, V. N. Orekhovich, and K. F. Firfarova..... 634 721

Volume 35, Number 4, Part 2 July-August, 1970

Investigation of the Structure and Properties of Rabbit Immunoglobulin Oxidized with N-Bromosuccinimide – I. A. Tarkhanova, A. Ya. Kul'berg, and L. V. Krasnova. 641 728
Cholinesterase Hydrolysis of N-Methyl-8-Acetoxyquinolinium Iodide – M. N. Umetskaya. 648 736
RNA in Human Leucocytes – M. N. Blinov and I. F. Seits..... 652 740
Effect of Buffer Molarity, Ammonium Ions, and pH on Plant Malate Dehydrogenase – V. L. Kretovich and T. A. Severnaya..... 657 746
Degradation of Native Dextrans by the Dextranglucosidase of Animal Tissues and the Effect of Concanavalin A on This Process – M. E. Preobrazhenskaya and E. L. Rozenfel'd..... 662 753
Preparation of Crystalline Histidine Decarboxylase from Micrococcus sp. n. – V. N. Prozorovskii, S. A. Tartakovskii, A. E. Alekseeva, A. Ya. Nikolaev, and S. R. Mardashev..... 667 759
Prothrombin Autoactivation during Blocking of Endogenous Thrombin by Diisopropyl Fluorophosphate and N-Tosyllysylchloromethyl Ketone – I. P. Baskova, S. M. Strukova, and A. Uriarte 670 763

	Engl.	Russ.
Determination of Retinal in the Form of O-Ethyloxime and Investigation of the Retinol /Retinal Ratio in Individual Tissues in Rats – A. A. Dmitrovskii and D. L. Rozenberg	674	768
Sialoglycolipids of the Starfish Distolasterias nippon. Isolation and Characteristics of the Monomeric Substance and Sialic Acids – I. G. Zhukova, T. A. Bogdanovskaya, G. P. Smirnova, and N. K. Kochetkov	680	775
Nucleic Acids of a Thermophilic Microorganism Bacillus coagulans Grown at Different Temperatures – A. P. Kalyuzhnaya, N. N. Mazurenko, and G. N. Zaitseva	685	781
Tryptophan-Containing Peptides of Pepsin – V. I. Vasenev, Yu. S. Kuznetsov, and V. M. Stepanov	690	787
Activation of Submitochondrial Particles by Succinate – V. A. Saks, L. V. Romashina, and V. N. Luzikov	699	797
Production of an Electrophoretically Homogeneous Lysine-Rich Histone from the Calf Thymus – B. A. Rebentish, V. G. Debabov, and N. G. Ermakova	703	802
trans-3-Hexadecenoic Acid in Chlorella Cells – G. L. Klyachko-Gurvich, V. E. Semenenko, and A. G. Vereshchagin	708	808
Comparative Characterization of the Histones from the Calf Thymus and Brain – A. A. Myul'berg, V. I. Dyurnbaum, V. N. Kokryakov, G. I. Chikhirzhina, and I. P. Ashmarin	713	815
Analysis of the Primary Structure of Peptides by Successive Cleavage of Methylthiohydantoins of N-Terminal Amino Acids – M. M. Amirkhanyan and V. M. Stepanov	721	825
Effects of an Enzymatic Preparation of α-L-Fucosidase from Animal Tissues on the Blood Group Substances (A + H) and Their Fragments – G. Ya. Vidershain, L. M. Likhosherstov, and S. N. Senchenkova	727	831
Investigation of the Reactivation of Hog Pepsin Incubated with Diazocarbonyl Reagents – T. A. Valueva and L. M. Ginodman	732	837
BRIEF COMMUNICATIONS		
Proof of the Participation of Two Enzymes in the Process of Microbiological 1,2-Dehydration and Reduction of the Δ'- Bond in the A-Ring of Steroids – N. N. Lestrovaya and M. I. Bukhar	737	843

Volume 35, Number 5, Part 1 September-October, 1970

Mikhail Mikhailovich Shemyakin (1908-1970)	739	851
The Combined Use of Mass Spectrometry and the Edman Method to Determine the Amino Acid Sequence in Peptides – N. A. Aldanova, E. I. Vinogradova, S. A. Kazaryan, B. V. Rozynov, and M. M. Shemyakin	742	854
Complexes of Polysaccharides with Oligoribonucleotides and Their Biological Action – A. N. Petrova	748	861
The Effect of the Extraction Medium on the Spectral and Photochemical Properties of Chloroplast Fragments – S. M. Kochubei and T. A. Reingard	754	868
Study of Pheophytinization and Photopheophytinization of Chlorophyll *a* in the Synthetic Pigment–Protein Complex – Yu. E. Giller and L. N. Yukhananova	758	873
Effects of Nicotinamide Analogs on Biosyntheses Coupled with the Folic Acid Cycle –Yu. A. Zilber, A. K. Belousova, and G. Ya. Dubur	763	879
Examination of Acetylation of Sulfanilamide in Isolated Chloroplasts Using Spectrophotometric and Chromatographic Methods – V. S. Rodionov, E. I. Lizenko, and S. O. Tsaregorodtseva	769	886
Structure and Reactivity of Steroids. Kinetics of Oxidation of Estra-3,17β-Diol and Its 3-Methyl Ether by an Enzyme Prepared from Human Placenta – V. V. Egorova, A. V. Zakharychev, and S. N. Ananchenko	777	895

	Engl./Russ.	
Photosensitized Oxidation of Histidine Decarboxylase from Micrococcus sp. n. – N. S. Dabagov, S. R. Mardashev, and I. I. Martynova	782	901
Some Data on the Structure of Histidine Decarboxylase from Micrococcus sp. n. V. N. Prozorovskii, S. R. Mardashev, and A. M. Sokhina	788	908
Characteristics of the DNA of SW Phage Lyzing Bacillus subtilis – G. V. Petrovskii, B. S. Narodnitskii, and T. I. Tikhonenko	791	911
Structural Modifications of DNA under the Influence of K_2PtCl_4 – E. T. Zakharenko and Yu. Sh. Moshkovskii	796	917
The Importance of Thiazole and Its 5-Hydroxyethyl Radical in the Binding of Thiamine by Tissues – Yu. M. Ostrovskii. G. A. Dosta, M. N. Sadovnik, N. N. Mosolov, A. A. Yasnikov, A. Shellenberger, G. Hubner, and H. Kishi	801	922
Amino Acid Composition of Heavy and Light Chains of 7S Diphtheria and Tetanus Antitoxins and Nonimmune 7S T-Globulin Isolated from the Serum of One Horse – I. I. Raikher, L. I. Koidan, and N. M. Protserova	809	932
Kinetic Properties of a Soluble "Biosynthetic" L-Threonine Dehydrase from Pea Seedlings – Z. S. Kagan, D. A. Khashimov, and B. I. Kurganov	813	937

Volume [illegible], Number 5, Part 2 September-October, 1970

Composition and Kinetic Properties of Creatine Kinase from Skeletal Muscles – E. P. Chetverikova, A. V. Krinskaya, N. A. Rozanova, V. V. Rybina, and L. L. Alievskaya	827	953
UDPG-Glycogen Synthetase from Rabbit Liver and Thymus and from Human Leukoctyes – V. N. Filippova, L. I. Filanovskaya, and I. F. Seits	834	962
The Pathway of Carbon in the Photosynthesis of Rhodopseudomonas Palustris – I. I. Chernyad'ev and N. G. Doman	839	968
Kinetics of Inhibition of Succinate Oxidase By Oxaloacetate – N. I. Zimakova, Yu. N. Shvetsov, and A. D. Vinogradov	843	973
Interaction of Four Active Forms of Trypsin with Specific Substrate and Pancreatic Inhibitor – I. V. Berezin, N. F. Kazanskaya, and N. I. Larionova	851	983
Cytochrome Systems of Bacillus brevis BG – The Producer of Gramicidin S – T. P. Vasil'eva, V. V. Groshev, and S. V. Shestakov	856	989
Study of the Conformational Changes of Flagellin during Self-Assembly by the Method of Optical Rotatory Dispersion – A. L. Metlina and B. F. Poglazov	860	994
Some Properties of Tea Polyphenol Oxidase – G. A. Buzun, K. M. Dzhemukhadze and L. F. Mileshko	868	1002
Corrinoid Coenzymes Synthesized by Methanobacillus kuzneceovii – V. V. Pchelkina, E. S. Pantskhava, and V. N. Bukin	873	1007
Glycolipoproteins in Preparations of Bacterial DNA – Yu. F. Drygin, I. A. Kozlov, and A. A. Bogdanov	879	1014
Conditions of Elimination of Thiamine Pyrophosphate from Holotransketolase – G. A. Kochetov and A. E. Izotova	888	1023
Interaction of Yeast Hexokinase with Hydrocortisone – G. V. Titova	892	1028
Peptide Maps of Reduced Carboxymethylated Human Ceruloplasmin – M. M. Shavlovskii, and I. M. Vasilets	895	1031
Effect of Glucocorticoids on Decomposition of Deoxyribonucleoproteins (DNP) in Lymphoid Cells in Vivo and in Vitro – N. V. Ermolaeva and N. A. Vodolazskaya	901	1039
Mechanism of the Synthesis of Adenylic Nucleotides in Brevibacterium ammoniagenes ATSS No. 6872 – T. T. Rebrova and S. S. Debov	907	1046
BRIEF COMMUNICATIONS		
Electrophoretically Different forms of Yeast Enolase – M. A. Geidan and R. A. Zhagat	912	1051

Engl./Russ.

Some Peculiarities of the Thermal Degradation of Submitochondrial Particles – V. N. Luzikov, V. A. Saks, and I. V. Berezin 914 1053
Human Blood Serum Kallikrein; Activity of the Enzyme and a Chromatographic Method for Its Determination – T. S. Paskhina and G. A. Yarovaya 916 1055
Isoforms of Transketolase from Baker's Yeast – G. A. Kochetov and N. N. Chernov 919 1059

Volume 35, Number 6, Part 2 November-December, 1970

The Phosphopeptide Fragment of Porcine Pepsin – É. A. Vakhitova, M. M. Amirkhanyan, and V. M. Stepanov 1009 1164
Immunochemical and Electrophoretic Study of the Proteins and Some Enzymes of the Cytoplasm of Rat Kidney Cells – K. P. Kashkin, D. N. Bochkova, and B. P. Surinov 1014 1170
Purification and Some Properties of Δ'-Steroid Reductase Isolated from Mycobacterium globiforme 193 – N. N. Lestrovaya and M. I. Bukhar 1024 1182
Extracellular Polysaccharides Produced by Yeasts of the Genus Rhodotorula – N. P. Elinov and G. A. Vitovskaya 1028 1187
RNA Synthesis in Isolated Nuclei of Early Loach Embryos – R. G. Akhalkatsi, M. Simich, M. Ya. Timofeeva, and K. A. Kafiani 1033 1193
Fractionation of RNA from Cells Infected with Newcastle Disease Virus by Equilibirum Centrifugation in a Cesium Sulfate Density Gradient – A. F. Sito and V. M. Zhdanov 1040 1202
The Sigmoid Nature of the Dependence of the Initial Reaction Rate on the Substrate Concentration in the Inhibition of the Hydrolysis of Ethyl Aceturate by N-Acetyl-D-Tryptophan under the Action of α-Chymotrypsin – K. Martinek, A. V. Levashov, V. L. Rubailo, S. D. Varfolomeev, and I. V. Berezin 1044 1207
Effect of Shock Waves on α-Amino Acids – L. A. Baratova, V. I. Gol'danskii, M. Yu. Kosygin, and F. A. Yampol'skii 1051 1216
Effect of Coumarin and Synthetic Growth Retardants on Synthesis and Decomposition of RNA and Protein in Cut Leaves during the Aging Process – Ya. S. Knipl and O. N. Kulaeva 1053 1219
The Nature of Legoglobin in Lupin Nodules – S. S. Melik-Sarkisyan, V. V. Yarovenko, and V. L. Kretovich 1062 1230
Properties of 30-60S DNA-like RNA of Animal Cells – K. G. Gazaryan, G. I. Kir'yanov, and A. S. Kul'minskaya 1069 1238
The Possible Role of Carnitine in the Transport of Fatty Acids through the Mitochondrial Membrane – S. E. Severin, V. P. Skulachev, and L. S. Yaguzhinskii 1079 1250
Kinetic Role of Complex Formation in α-Chymotrypsin Catalysis – I. V. Berezin and K. Martinek 1082 1254
Optical Rotatory Dispersion and Circular Dichroism of Transketolase from Baker's Yeast: Induced Optical Activity Arising during Binding of TPP with Apoenzyme – G. A. Kochetov, R. A. Usmanov, and V. P. Merzlov 1085 1257

INDEX
Author Index, Volume 35, Numbers 1-6, 1970 1089
Tables of Contents, Volume 35, Numbers 1-6, 1970 1093